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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,314	09/29/2000	Ralph Bonomo	RPS9-00-0058	2397
25299	7590	04/29/2004	EXAMINER	
IBM CORPORATION			VO, TIM T	
PO BOX 12195			ART UNIT	
DEPT 9CCA, BLDG 002			PAPER NUMBER	
RESEARCH TRIANGLE PARK, NC 27709			2112	15
DATE MAILED: 04/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/677,314	BONOMO ET AL.
	Examiner	Art Unit
	Tim T. Vo	2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 17 February 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-8 and 10-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-8 and 10-20 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_

***Response to Arguments***

1. In view of the appellant's brief on appeal filed on 2/17/2004, PROSECUTION IS HEREBY REOPENED. A new rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

**Part III DETAILED ACTION**

***Notice to Applicant(s)***

This application has been examined. Claims 1-8 and 10-20 are pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action: A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the

requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-8 and 10-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kelley patent number 6,170,029 referred hereinafter "Kelley".

As for claims 1, 10 and 17, Kelley teaches a method for increasing control information from a single general purpose input/output (GPIO) mechanism (see figures 2, 5 load control logic 203, 303, hot plug control logic 305 and column 4 lines 57-67, wherein the load control logic 303, and the hot plug control logic 305 determine the presence/absence of the PCI cards into the PCI slots via the control signal bus 215, see column 3 lines 18-23), the method comprising:

utilizing a single GPIO mechanism with a socket on a computer system (see figures 2, 5 load control logic 203, 303, hot plug control logic 305 and column 4 lines 57-67, wherein the load control logic 303, and the hot plug control logic 305 determine the presence/absence of the PCI cards into the PCI slots via the control signal bus 215, see column 3 lines 18-23); and

determining whether a first card, a second card, or no card is installed in the socket according to detected changes in signals state on a single line between the GPIO mechanism and the socket (see figures 2, 5, control signal bus 215 and column 3 lines 18-23, wherein the signal bus 215 includes presence detect signal whether PCI card is plugged into the PCI slot. Further, figure 2, discloses slot#1 and slot#4 has PCI device and slot #2-3 are empty).

As for claims 2-5, 13-15, 20, Kelley teaches wherein determining further comprises writing a signal in first state by a POST (power on self test) (see column 5

lines 40-65, wherein when power-on the BIOS stored in ROM will perform POST procedures and the hot plug controller 307, load control logic 303 determine the presence/absence from the four PCI slots via the bus 215 and then adjusting the load switches S1-S4 correspondingly).

As for claims 6-7, Kelley teaches wherein the state of the GPIO mechanism changes in accordance with state changes by the POST routine, no card is installed in the socket (see figure 2, slot#2-3 are empty).

As for claim 8, Kelley teaches wherein one of the first and second cards pulls-up the signal line, and the other of the first and second cards pulls down the signal line (see figure 2 and column 3 lines 18-23).

As for claims 11-12, Kelley teaches wherein the first card occupies the socket, the single signal is pulled to a first logic gate (see figure 2, bus 215, load control logic 303, hot plug control logic 305).

As for claims 16, 18-19, Kelley teaches circuit comprises resistor-capacitor circuit (see column 1 lines 20-52, wherein the Kelly teaches PCI bus according to the PCI specification, thus in the PCI specification, revision 2.1 includes resistor-capacitor to determine minimum and maximum drive characteristics of PCI output).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 703-308-5862. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tim T. Vo  
Primary Examiner  
Art Unit 2112

4/26/04